

Department of Energy

Washington, DC 20585

June 10, 2008

Dr. James Siegrist Lawrence Berkeley National Laboratory Cyclotron Road, MS 50-4049 Berkeley, CA 94720

Dear Dr. Siegrist:

The Particle Data Group (PDG) at the Lawrence Berkeley National Laboratory has accumulated and published crucial data for the field of high energy physics since the late 1970's. The group and the technology it uses have evolved dramatically over the years. The group and its resources have also grown. However, it appears that the group's reliance on a cadre of part-time volunteers (both national and international), retirees and computer specialists, although admirable and effective in the short-term, is an untenable solution for the long-term. In addition, the needs and interests of the research community the PDG serves are changing as the internet becomes the favored form of information dissemination and the field of high energy physics has broadened to include aspects of astrophysics and cosmology.

We think it essential for the PDG to engage in detailed long term planning so that it can provide its services to the community in a stable and predictable fashion. The group should develop a five-year plan which includes financial and FTE needs, and we should understand what its deliverables are and be able to assess their cost and value to the field.

The Office of High Energy Physics (OHEP) plans to conduct an external review of the Particle Data Group (PDG) on September 12, 2008, at the Department of Energy in Germantown. A review panel of experts in high energy physics and computer science is being convened for this task.

Each panel member will evaluate background material on the PDG past activities and they will each evaluate the PDG's presentations at the September 12th review. The focus of the review will be on assessing:

- The continued significance and relevance of the PDG to the high energy physics community.
- The PDG's five-year resource plan. This plan should include budget information and FTE tables. Salary, materials and operational costs should be addressed. Dependence on retirees as well as volunteers should be explained and the associated risks evaluated. Availability of hardware and software, and their costs and maintenance should be explained.



- Anticipated alternative sources of funding, both national and international, including "in-kind" contributions, should be delineated, as well as the deliverables expected in each case.
- A prioritized list of deliverables, with dates and estimated costs of each.
- The mix of online and offline (print) publications and the estimated costs of each.
- The interplay and competition between online PDG activities and those of the commercial search engines.

The day long review will consist of presentations, question-and-answer and executive sessions. The later part of the day will include an executive session and preliminary report writing and a brief close-out. Preliminary findings, comments, and recommendations will be presented at the close-out. You should work with John Kogut to make an agenda which can accommodate these goals.

Each panel member will be asked to review these aspects of the PDG within their domain of expertise and write an individual report on his/her findings. These reports will be due at the DOE two weeks after completion of the review. John Kogut, the Federal Project Officer of LBNL, will accumulate the reports and compile a final summary report based on the information in the letters.

You should set up a web site for the review with relevant background information on the PDG with links to the various relevant PDG sites. In addition, please distribute relevant background and project materials to the panel at least two weeks prior to the review. Please coordinate these efforts with John Kogut so that the needs of the review panel are met. The members of the panel are contained on a separate sheet in this package.

We greatly appreciate your willingness to assist us in this review. It is our intention that the review will provide useful and constructive information to lab management and the OHEP. We look forward to a very informative and stimulating review.

Sincerely,

Dennis Kovar

Acting Associate Director of Science for High Energy Physics